

SEQUENCE LISTING

<110> Wang, Chang Yi

<120> Immunogenic peptide composition as vaccines for the prevention and treatment of Alzheimer's Disease

<130> 1151-4167

<140> TBA

<141> 2001-5-25

<160> 76

<170> PatentIn Ver. 2.0

<210> 1

<211> 15

<212> PRT

<213> Hepatitis B virus

<400> 1

Phe	Phe	Leu	Leu	Thr	Arg	Ile	Leu	Thr	Ile	Pro	Gln	Ser	Leu	Asp
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<210> 2

<211> 30

<212> PRT

<213> Bordetella pertussis

<400> 2

Lys	Lys	Leu	Arg	Arg	Leu	Leu	Tyr	Met	Ile	Tyr	Met	Ser	Gly	Leu	Ala
1				5				10						15	

Val	Arg	Val	His	Val	Ser	Lys	Glu	Glu	Gln	Tyr	Tyr	Asp	Tyr
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<211> 17

<212> PRT

<213> Clostridium tetani

<400> 3

Lys	Lys	Gln	Tyr	Ile	Lys	Ala	Asn	Ser	Lys	Phe	Ile	Gly	Ile	Thr	Glu
1				5					10					15	

Leu

<210> 4

<211> 22

<212> PRT

<213> Clostridium tetani

"P00000"4625360

<400> 4
Lys Lys Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg Val Pro Lys
1 5 10 15

Val Ser Ala Ser His Leu
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<211> 15
<212> PRT
<213> Bordetella pertussis

<400> 5
Tyr Met Ser Gly Leu Ala Val Arg Val His Val Ser Lys Glu Glu
1 5 10 15

<210> 6
<211> 27
<212> PRT
<213> Clostridium tetani

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Tyr Asp Pro Asn Tyr Leu Arg Thr Asp Ser Asp Lys Asp Arg Phe Leu
1 5 10 15

Gln Thr Met Val Lys Leu Phe Asn Arg Ile Lys
20 25

<210> 7
<211> 24
<212> PRT
<213> Pertusaria trachythallina

<400> 7
Gly Ala Tyr Ala Arg Cys Pro Asn Gly Thr Arg Ala Leu Thr Val Ala
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Glu Leu Arg Gly Asn Ala Glu Leu
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<210> 8
<211> 15
<212> PRT
<213> Measles virus

<400> 8
Leu Ser Glu Ile Lys Gly Val Ile Val His Arg Leu Glu Gly Val
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<210> 9
<211> 20
<212> PRT

<210> 14
 <211> 39
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 Gln Ala Ile Pro Leu Val Gly Glu Leu Val Asp Ile Gly Phe Ala Ala
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 Thr Asn Phe Val Glu Ser Cys
 35

<210> 15
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 <213> Plasmodium falciparum

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 Asp His Glu Lys Lys His Ala Lys Met Glu Lys Ala Ser Ser Val Phe
 1 5 10 15
 Asn Val Val Asn Ser
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<210> 16
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 <213> Schistosoma mansoni

<400> 16
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 His

<210> 17
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 <213> Escherichia coli

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 Gly Leu Gln Gly Lys His Ala Asp Ala Val Lys Ala Lys Gly
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<210> 18
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<213> Escherichia coli

<400> 18

Gly Leu Ala Ala Gly Leu Val Gly Met Ala Ala Asp Ala Met Val Glu
1 5 10 15

Asp Val Asn

<210> 19

<211> 20

<212> PRT

<213> Escherichia coli

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Asn Ala Asn Lys
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<212> PRT

<213> Hepatitis B virus

<400> 20

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Leu Tyr Arg Glu
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<210> 21

<211> 12

<212> PRT

<213> Chlamydia trachomatis

<400> 21

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<210> 22

<211> 15

<212> PRT

<213> Measles virus

<400> 22

Leu Ser Glu Ile Lys Gly Val Ile Val His Arg Leu Glu Gly Val
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<210> 23

<211> 16
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1 5 10 15

<210> 24
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<213> Measles virus

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<210> 25
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<210> 26
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<210> 27
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<213> Measles virus

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<210> 28
<211> 15
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<213> Measles virus

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<210> 29
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 <213> Measles virus

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<210> 30
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 <212> PRT
 <213> Measles virus

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<210> 32
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 <212> PRT
 <213> Measles virus

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<210> 33
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 <213> Measles virus

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<210> 34
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 <213> Measles virus

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<210> 35
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<210> 36
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<210> 37
 <211> 15
 <212> PRT
 <213> Measles virus

<400> 37
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<210> 38
 <211> 19
 <212> PRT
 <213> Measles virus

<400> 38
 Ile Ser Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly
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Ile Leu Phe

<210> 39
 <211> 19
 <212> PRT
 <213> Measles virus

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Met Leu Phe

<210> 40
<211> 19
<212> PRT
<213> Measles virus

<400> 40
Ile Ser Leu Ser Glu Ile Lys Gly Val Ile Val His Lys Leu Glu Gly
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Val Leu Phe

<210> 41
<211> 19
<212> PRT
<213> Measles virus

<400> 41
Ile Ser Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly
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Ile Leu Phe

<210> 42
<211> 19
<212> PRT
<213> Measles virus

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Ile Leu Phe

<210> 43
<211> 19
<212> PRT
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<400> 43
Ile Ser Leu Ser Glu Ile Lys Gly Val Ile Val His Lys Leu Glu Gly
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Met Leu Phe

<210> 44

<211> 19
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 Val Leu Phe

<210> 45
 <211> 19
 <212> PRT
 <213> Measles virus

<400> 45
 Ile Ser Leu Thr Glu Ile Arg Thr Val Ile Val Thr Arg Leu Glu Thr
 1 5 10 15
 Val Leu Phe

<210> 46
 <211> 19
 <212> PRT
 <213> Measles virus

<400> 46
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 Ile Leu Phe

<210> 47
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 <213> Measles virus

<400> 47
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 1 5 10 15
 Ile Leu Phe

<210> 48
 <211> 19
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 <213> Measles virus

<400> 48

Ile Ser Ile Thr Glu Ile Arg Thr Val Ile Val Thr Arg Ile Glu Thr
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Ile Leu Phe

<210> 49
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 <213> Measles virus

<400> 49
 Ile Ser Met Ser Glu Met Lys Gly Val Ile Val His Lys Met Glu Gly
 1 5 10 15

Met Leu Phe

<210> 50
 <211> 19
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 <213> Measles virus

<400> 50
 Ile Ser Leu Thr Glu Ile Arg Thr Val Ile Val Thr Arg Leu Glu Thr
 1 5 10 15

Val Leu Phe

<210> 51
 <211> 19
 <212> PRT
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<400> 51
 Ile Ser Ile Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr
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Ile Leu Phe

<210> 52
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 <212> PRT
 <213> Hepatitis B virus

<400> 52
 Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp
 1 5 10 15

<210> 53

<211> 18
 <212> PRT
 <213> Hepatitis B virus

<400> 53
 Lys Lys Lys Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser
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 Leu Asp

<210> 54
 <211> 14
 <212> PRT
 <213> Hepatitis B virus

<400> 54
 Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu
 1 5 10

<210> 55
 <211> 18
 <212> PRT
 <213> Hepatitis B virus

<400> 55
 Lys Lys Lys Leu Phe Leu Leu Thr Lys Leu Leu Thr Leu Pro Gln Ser
 1 5 10 15
 Leu Asp

<210> 56
 <211> 18
 <212> PRT
 <213> Hepatitis B virus

<400> 56
 Arg Arg Arg Ile Lys Ile Ile Thr Arg Ile Ile Thr Ile Pro Leu Ser
 1 5 10 15
 Ile Arg

<210> 57
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 <212> PRT
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<400> 57
 Lys Lys Lys Val Arg Val Val Thr Lys Val Val Thr Val Pro Ile Ser
 1 5 10 15

Val Asp

<210> 58
<211> 18
<212> PRT
<213> Hepatitis B virus

<400> 58
Lys Lys Lys Phe Phe Phe Phe Thr Lys Phe Phe Thr Phe Pro Val Ser
1 5 10 15

Phe Asp

<210> 59
<211> 18
<212> PRT
<213> Hepatitis B virus

<400> 59
Lys Lys Lys Leu Phe Leu Leu Thr Lys Leu Leu Thr Leu Pro Phe Ser
1 5 10 15

Leu Asp

<210> 60
<211> 18
<212> PRT
<213> Hepatitis B virus

<400> 60
Lys Lys Lys Ile Ile Thr Ile Thr Arg Ile Ile Thr Ile Ile Thr Thr
1 5 10 15

Ile Asp

<210> 61
<211> 17
<212> PRT
<213> Hepatitis B virus

<400> 61
Lys Lys Lys Ile Ile Thr Ile Thr Arg Ile Ile Thr Ile Ile Thr Thr
1 5 10 15

Ile

<210> 62

<211> 18
 <212> PRT
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 Ile Asp

<210> 63
 <211> 16
 <212> PRT
 <213> Hepatitis B virus

<400> 63
 Phe Ile Thr Met Asp Thr Lys Phe Leu Leu Ala Ser Thr His Ile Leu
 1 5 10 15

<210> 64
 <211> 19
 <212> PRT
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<400> 64
 Lys Lys Lys Phe Ile Thr Met Asp Thr Lys Phe Leu Leu Ala Ser Thr
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 His Ile Leu

<210> 65
 <211> 42
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<400> 65
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
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 Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Ala Ile Ile
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 Gly Leu Met Val Gly Gly Val Val Ile Ala
 35 40

<210> 66
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 66

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
 1 5 10 15

Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys
 20 25

<210> 67
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 <212> PRT
 <213> Homo sapiens

<400> 67
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His
 1 5 10

<210> 68
 <211> 12
 <212> PRT
 <213> Homo sapiens

<400> 68
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val
 1 5 10

<210> 69
 <211> 10
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<400> 69
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<210> 70
 <211> 45
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<400> 70
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
 1 5 10 15

Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Gly Phe Phe
 20 25 30

Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp
 35 40 45

<210> 71
 <211> 30
 <212> PRT
 <213> Measles virus

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 Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile Leu Phe
 20 25 30

<210> 72
 <211> 32
 <212> PRT
 <213> Measles virus

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 Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile Leu Phe
 20 25 30

<210> 73
 <211> 34
 <212> PRT
 <213> Measles virus

<400> 73
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Lys Ile
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 Ser Ile Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile
 20 25 30

Leu Phe

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 <212> PRT
 <213> Measles virus

<400> 74
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
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 Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Lys Ile Ser Ile
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 Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile Leu Phe
 35 40 45

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 <212> PRT
 <213> Measles virus

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 Leu Phe

<210> 76
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 <212> PRT
 <213> Measles virus

<400> 76
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 1 5 10 15
 Ser Ile Thr Glu Ile Arg Thr Val Ile Val Thr Arg Ile Glu Thr Ile
 20 25 30
 Leu Phe

SEQUENCE LISTING

<110> Wang, Chang Yi

<120> Immunogenic peptide composition as vaccines for the prevention and treatment of Alzheimer's Disease

<130> 1151-4167

<140> TBA

<141> 2001-5-25

<160> 76

<170> PatentIn Ver. 2.0

<210> 1

<211> 15

<212> PRT

<213> Hepatitis B virus

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<211> 30

<212> PRT

<213> Bordetella pertussis

<400> 2

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Val Arg Val His Val Ser Lys Glu Glu Gln Tyr Tyr Asp Tyr
20 25 30

<210> 3

<211> 17

<212> PRT

<213> Clostridium tetani

<400> 3

Lys Lys Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu
1 5 10 15

Leu

<210> 4

<211> 22

<212> PRT

<213> Clostridium tetani

<400> 4

Lys Lys Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg Val Pro Lys
1 5 10 15

Express Mail Label No.
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Val Ser Ala Ser His Leu
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<210> 5
<211> 15
<212> PRT
<213> Bordetella pertussis

<400> 5
Tyr Met Ser Gly Leu Ala Val Arg Val His Val Ser Lys Glu Glu
1 5 10 15

<210> 6
<211> 27
<212> PRT
<213> Clostridium tetani

<400> 6
Tyr Asp Pro Asn Tyr Leu Arg Thr Asp Ser Asp Lys Asp Arg Phe Leu
1 5 10 15

Gln Thr Met Val Lys Leu Phe Asn Arg Ile Lys
20 25

<210> 7
<211> 24
<212> PRT
<213> Pertusaria trachythallina

<400> 7
Gly Ala Tyr Ala Arg Cys Pro Asn Gly Thr Arg Ala Leu Thr Val Ala
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Glu Leu Arg Gly Asn Ala Glu Leu
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<210> 8
<211> 15
<212> PRT
<213> Measles virus

<400> 8
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1 5 10 15

<210> 9
<211> 20
<212> PRT
<213> Escherichia coli

<400> 9
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Thr Glu Ser Tyr
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 <211> 17
 <212> PRT
 <213> Clostridium tetani

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Thr

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 <213> Clostridium tetani

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 <213> Chlamydia trachomatis

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Thr Thr Gly Tyr Leu Lys Gly Asn Ser
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<210> 13
 <211> 23
 <212> PRT
 <213> Diphtheria

<400> 13
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Ile Leu Pro Gly His Gly Cys
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<210> 14
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 <212> PRT
 <213> Diphtheria

<400> 14
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Trp Val Arg Asp Ile Ile Asp Asp Phe Thr Asn Glu Ser Ser Gln Lys

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25

30

Thr Asn Phe Val Glu Ser Cys
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<212> PRT
<213> Plasmodium falciparum

<400> 15
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1 5 10 15

Asn Val Val Asn Ser
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<210> 16
<211> 17
<212> PRT
<213> Schistosoma mansoni

<400> 16
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His

<210> 17
<211> 14
<212> PRT
<213> Escherichia coli

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<210> 18
<211> 19
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<213> Escherichia coli

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Asp Val Asn

<210> 19
<211> 20
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Asn Ala Asn Lys
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<210> 20
<211> 20
<212> PRT
<213> Hepatitis B virus

<400> 20
Ser Asp Phe Phe Pro Ser Val Arg Asp Leu Leu Asp Thr Ala Ser Ala
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Leu Tyr Arg Glu
20

<210> 21
<211> 12
<212> PRT
<213> Chlamydia trachomatis

<400> 21
Thr Ile Asn Lys Pro Lys Gly Tyr Val Gly Lys Glu
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<210> 22
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<400> 22
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1 5 10 15

<210> 24
<211> 16
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<213> Measles virus

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Glu Ile Ser Glu Ile Arg Gly Ile Ile Ile His Arg Ile Glu Gly Ile
1 5 10 15

<210> 25

Protein Data Bank

<211> 16
<212> PRT
<213> Measles virus

<400> 25
Asp Val Ser Asp Val Lys Gly Val Val Val His Lys Val Asp Gly Val
1 5 10 15

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<210> 27
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Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly Ile
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<213> Measles virus

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<210> 29
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<212> PRT
<213> Measles virus

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1 5 10 15

<210> 30
<211> 15
<212> PRT
<213> Measles virus

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<211> 15

TC2290416259360

<213> Measles virus

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<210> 38

<211> 19

<212> PRT

<213> Measles virus

<400> 38

Ile Ser Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly
1 5 10 15

Ile Leu Phe

<210> 39

<211> 19

<212> PRT

<213> Measles virus

<400> 39

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1 5 10 15

Met Leu Phe

<210> 40

<211> 19

<212> PRT

<213> Measles virus

<400> 40

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1 5 10 15

Val Leu Phe

<210> 41

<211> 19

<212> PRT

<213> Measles virus

<400> 41

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1 5 10 15

Ile Leu Phe

<210> 42

<211> 19

105550-465950

<210> 47
<211> 19
<212> PRT
<213> Measles virus

<400> 47
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1 5 10 15
Ile Leu Phe

<210> 48
<211> 19
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<213> Measles virus

<400> 48
Ile Ser Ile Thr Glu Ile Arg Thr Val Ile Val Thr Arg Ile Glu Thr
1 5 10 15
Ile Leu Phe

<210> 49
<211> 19
<212> PRT
<213> Measles virus

<400> 49
Ile Ser Met Ser Glu Met Lys Gly Val Ile Val His Lys Met Glu Gly
1 5 10 15
Met Leu Phe

<210> 50
<211> 19
<212> PRT
<213> Measles virus

<400> 50
Ile Ser Leu Thr Glu Ile Arg Thr Val Ile Val Thr Arg Leu Glu Thr
1 5 10 15
Val Leu Phe

<210> 51
<211> 19
<212> PRT
<213> Measles virus

<400> 51
Ile Ser Ile Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr

Ile Arg

<210> 57
<211> 18
<212> PRT
<213> Hepatitis B virus

<400> 57
Lys Lys Lys Val Arg Val Val Thr Lys Val Val Thr Val Pro Ile Ser
1 5 10 15

Val Asp

<210> 58
<211> 18
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<213> Hepatitis B virus

<400> 58
Lys Lys Lys Phe Phe Phe Phe Thr Lys Phe Phe Thr Phe Pro Val Ser
1 5 10 15

Phe Asp

<210> 59
<211> 18
<212> PRT
<213> Hepatitis B virus

<400> 59
Lys Lys Lys Leu Phe Leu Leu Thr Lys Leu Leu Thr Leu Pro Phe Ser
1 5 10 15

Leu Asp

<210> 60
<211> 18
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<400> 60
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1 5 10 15

Ile Asp

<210> 61
<211> 17
<212> PRT
<213> Hepatitis B virus

<211> 28
<212> PRT
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<400> 66
Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
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Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys
20 25

<210> 67
<211> 14
<212> PRT
<213> Homo sapiens

<400> 67
Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His
1 5 10

<210> 68
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<212> PRT
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<400> 68
Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val
1 5 10

<210> 69
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<400> 69
Asp Ala Glu Phe Arg His Asp Ser Gly Tyr
1 5 10

<210> 70
<211> 45
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<400> 70
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1 5 10 15

Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Gly Phe Phe
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Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp
35 40 45

<210> 71
<211> 30
<212> PRT

<213> Measles virus

<400> 71

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Lys Ile Ser Ile Thr Glu
1 5 10 15

Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile Leu Phe
20 25 30

<210> 72

<211> 32

<212> PRT

<213> Measles virus

<400> 72

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val Lys Ile Ser Ile
1 5 10 15

Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile Leu Phe
20 25 30

<210> 73

<211> 34

<212> PRT

<213> Measles virus

<400> 73

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Lys Ile
1 5 10 15

Ser Ile Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile
20 25 30

Leu Phe

<210> 74

<211> 48

<212> PRT

<213> Measles virus

<400> 74

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
1 5 10 15

Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Lys Ile Ser Ile
20 25 30

Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile Leu Phe
35 40 45

<210> 75
<211> 34
<212> PRT
<213> Measles virus

<400> 75
Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Lys Ile
1 5 10 15
Ser Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly Ile
20 25 30
Leu Phe

<210> 76
<211> 34
<212> PRT
<213> Measles virus

<400> 76
Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Lys Ile
1 5 10 15
Ser Ile Thr Glu Ile Arg Thr Val Ile Val Thr Arg Ile Glu Thr Ile
20 25 30
Leu Phe

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